DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000892 Address: 333 Burma Road **Date Inspected:** 13-Nov-2007

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island

CWI Name: CWI Present: Yes Arthur Peterson No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG Deck Plate Trial**

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the welding of Orthotropic Box Girder (OBG First Deck Plate Mock-up Weld Trial, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Welding was performed on a 13 meter and 1.7 meter Closed Rib sections. Closed Rib sections were placed on a camber jig prior to welding. QA Inspector Viars monitored welding operations of each section of welding on Gas Metal Arc Welding (GMAW) for the weld root and Submerged Arc Welding for the Cover pass. Semi automatic welding was performed with both processes with a welding head manipulator. Closed rib welds # 1, 2, 5, 6, 9 and 10 were welded simultaneously the full length of each section. Closed rib welds # 3, 4, 7 and 8 were welded in the same manner. Submerged Arc Welding of weld joint # 3, 4, 7 and 8 was performed on swing shift.

Gas Metal Arc Welding of the root pass was performed in accordance to WPS-B-T-2342-U1 (U-ribs). The Submerged Arc Welding was performed in accordance to WPS-B-T-2322-U1 (U-ribs). Amperage of both processes appeared to be within the tolerance of the applicable welding procedure specification.

Caltrans QA Inspector monitored welding operations and performed visual observations of the OBG Deck Plate Mock-up Weld Trial.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)



Summary of Conversations:

As idenified within the contents of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer